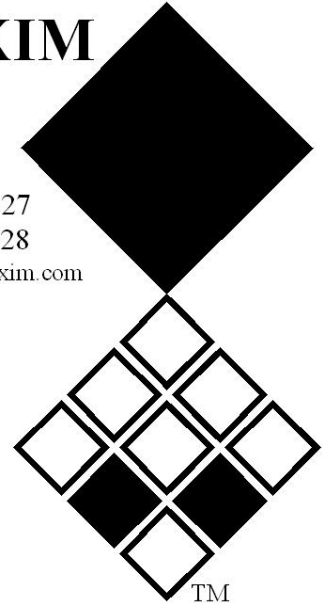


User manual and parts handbook Overseeder

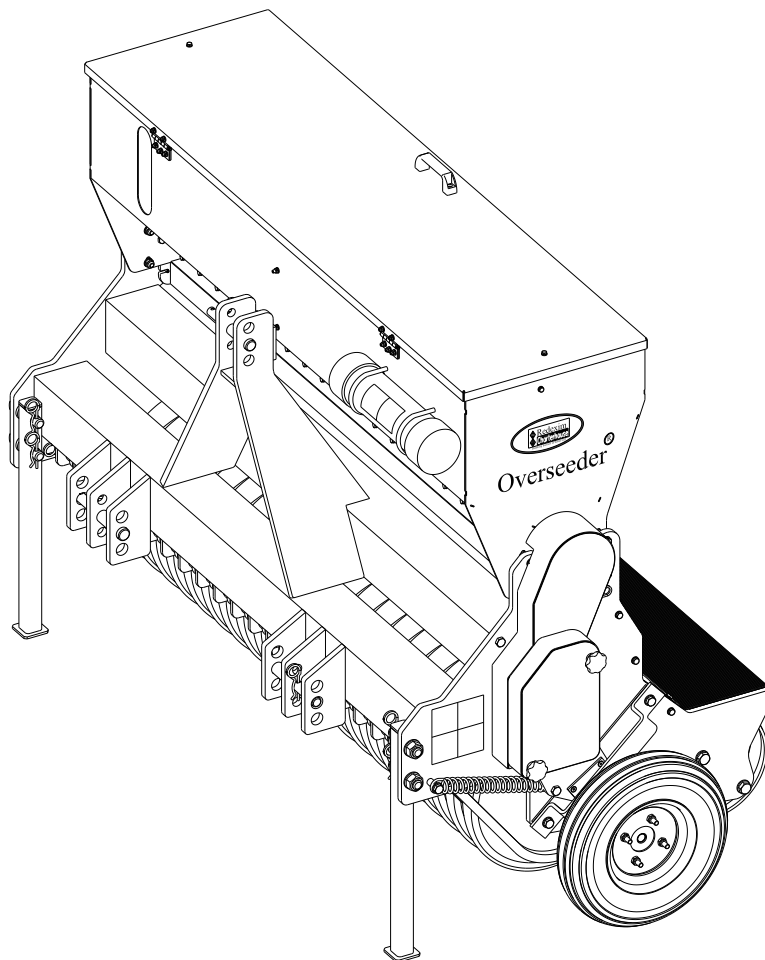
Model 1275/1575/2075
Serial number:

REDEXIM

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Translation of the original operating instructions



ATTENTION:

TO ENSURE SAFE USE OF THIS MACHINE AND TO BE ABLE TO ACHIEVE THE BEST RESULTS, IT IS OF MAJOR IMPORTANCE TO READ THIS USER MANUAL THOROUGHLY BEFORE USING THE OVERSEEDER.

FOREWORD

Congratulations with the purchase of your Overseeder. To ensure long and safe use of this Overseeder, it is of major importance to all users to read and understand this user manual. Operation of this machine is not safe without full knowledge of the content of the manual.

The Overseeder is not an independently operating machine. The user is responsible for using the appropriate tractor. The user must also check the tractor/Overseeder combination for safety aspects, such as noise level, adequate user instructions and any risks.

The Overseeder is solely intended for use on lawns and other areas where grass could grow.

On the next page you will first find the general safety instructions. Every user must know and apply them. After this, a registration card is included. This card should be returned for handling any future claims.

This user manual offers many instructions numbered in sequence. This sequence should be observed. An asterisk * indicates a safety instruction. An @ indicates a tip and/or note.

All information and technical specifications provided at the moment that this document is published are the most recent ones. Design specifications may be changed without prior notice.

This document is a translation of the original operating instructions.
Upon request, the original operating instructions are available in Dutch.

GUARANTEE CONDITIONS

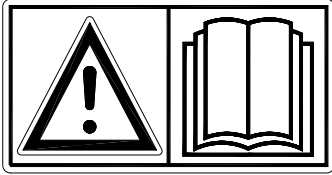
THIS OVERSEEDER COMES WITH A GUARANTEE FOR DEFECTIVE MATERIALS.
THIS GUARANTEE IS VALID FOR A PERIOD OF 12 MONTHS FROM THE PURCHASING DATE.
OVERSEEDER GUARANTEES ARE SUBJECT TO THE "GENERAL CONDITIONS FOR SUPPLY OF PLANT AND MACHINERY FOR EXPORT, NUMBER 188", PUBLISHED UNDER THE AUSPICES OF THE UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE.

REGISTRATION CARD

For your own information, please complete the table below:

Serial number of machine	
Dealer name	
Purchasing date	
Remarks	

! SAFETY INSTRUCTIONS !

 <p>Fig. 1</p>	<p>The design of the Overseeder allows for safe use. However, this is only possible if the user fully observes the safety instructions given in this manual.</p> <p>Read and understand (Fig. 1) the manual before starting to use the Overseeder.</p> <p>Not using the machine as described in the manual may lead to injury and/or damage to the Overseeder.</p>
---	---

- (1) The Overseeder is solely intended for tilling lawns or areas where grass should grow.

Any other use is considered to be incorrect use. The manufacturer does not accept any liability with regard to damage resulting from incorrect use; all resulting risks are the responsibility of the user.

Correct use also includes following the manufacturer's instructions for use, maintenance and repair.

Before using the Overseeder, inspect the area to be treated.
Remove any loose obstacles and avoid irregularities.

- (2) The Overseeder was constructed according to the latest technological knowledge and is safe to use.

Improper use, maintenance or repair of the machine may result in injury to both the user and others. **This should be avoided!**

Always use the Overseeder in combination with the appropriate tractor as described in the technical data.

- (3) All persons whom the owner assigns to operate, maintain or repair the Overseeder must read and completely understand the operating manual and in particular the **Safety Instructions** section.

The user is responsible for a **safe tractor/Overseeder combination. This unit must be tested** in terms of noise, safety and ease-of-use. In addition, user's instructions must be prepared.

- (4) Before using the Overseeder, the user is **obliged** to inspect it for **visible damage and defects**.

Any changes of the Overseeder (including its functioning) that may affect its safety must be corrected immediately.

For safety reasons it is in principle forbidden to make changes in or additions to the Overseeder (with the exception of those approved by the manufacturer).

If any **modifications** have been made to the Overseeder, the present CE certificate becomes null and void and the person who made the modifications should **himself** make sure a new **CE certificate** is granted.

Inspect the Overseeder for loose bolts/nuts/parts before each use.
If present, inspect the hydraulic hoses regularly and replace them if they are damaged or show signs of wear. The replacement hoses must meet the manufacturer's technical specifications.

Always relieve the pressure from the hydraulic installation, if present, before carrying out any work on it.

NEVER use de Overseeder when protective covers and safety stickers are missing.

NEVER crawl under the Overseeder.
Tilt the Overseeder if you need to have access to the bottom.

NEVER step off the tractor while the engine is still running.

When carrying out maintenance activities, adjustments or repairs make sure the Overseeder is locked to prevent it from sinking/riding/sliding away.

When carrying out any maintenance activities, adjustments or repairs, **always switch off the tractor engine first, remove the tractor key from the ignition and disconnect the PTO** (Fig. 2).

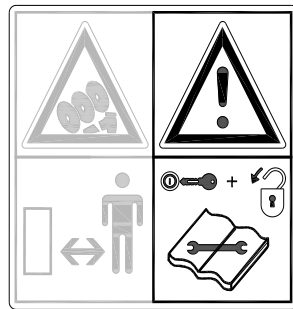


Fig 2

When carrying out any maintenance or repair activities, make sure to use original Overseeder parts only. This will ensure safety for the machine and its user.

Only authorised technical personnel may carry out adjustments and repairs to the Overseeder.

Keep an overview of repairs.

- (5) In addition to the instructions in this user manual, the generally applicable regulations with respect to safety and working conditions must be observed.

For use on public roads the relevant traffic rules also apply.

Transporting persons is not permitted!

Do not use the Overseeder when it is dark, during heavy rain/storms or on slopes with a gradient of more than 20 degrees.

- (6) Before starting to work, all persons operating the Overseeder must be familiar with all its functions and controls.

Connect the Overseeder to the vehicle that will pull it exactly according to the instructions **(Danger of injury!)**
Before driving off, make sure you have a clear view both nearby and far away.

On both sides of the Overseeder, safety stickers (Fig. 3, 4, 5) have been applied to the sideboards and to the back cover (Fig. 6) showing these warnings. Make sure these safety stickers are always clearly visible and legible. Replace them if they are damaged.

During operation, make sure there are **NO persons in the danger area** of the Overseeder to prevent them from getting injured by moving parts (Fig. 3).

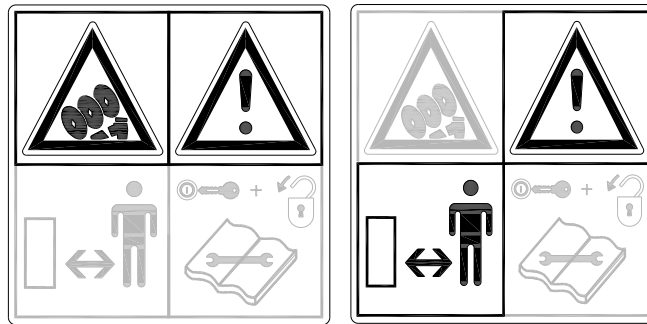


Fig 3

fig 4

Keep a distance of at least 4 metres! (Fig. 4)

Be aware of the maximum lifting capacity of the towing vehicle.

Wear suitable clothing. Wear sturdy shoes with a steel tip, wear long trousers, do up long hair and wear no loose clothing.

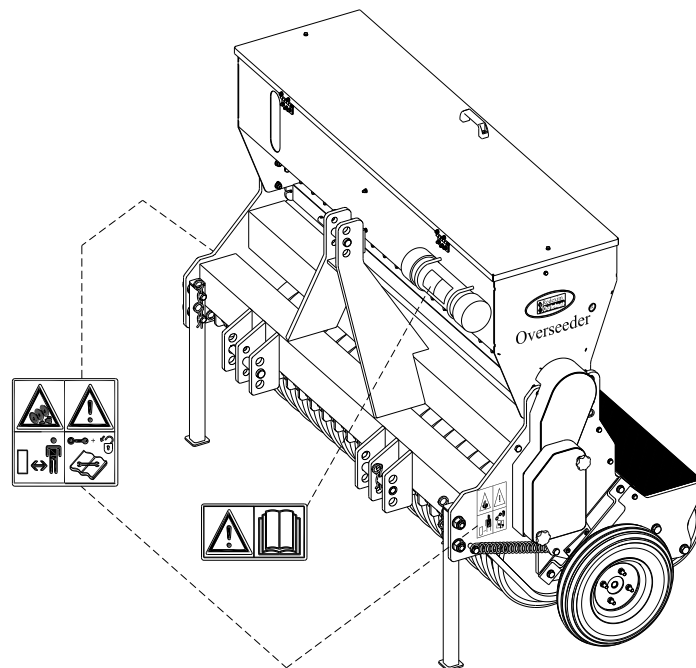


Fig. 5

- (7) Location of safety stickers (Fig. 5).

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1.0 TECHNICAL DATA

Model	1275	1575 / 1575LV	2075
Working width	1.20 m (47.2")	1.58 m (62.2")	2.08 m (81.9")
Working depth	5 mm - 20 mm (0.19" - 0.78")		
Seeding speed	Up to 12 km/h (7.5 mph)		
Weight	665kg (1315 lbs)	1160kg (2293 lbs) / 825 kg (1819 lbs)	1480 kg (3042 lbs)
Seeding row distance	75 mm (2.9")		
Number of cutting elements	16	21	28
Recommended tractor	30 HP with minimum lifting capacity of 800 kg (1764 lbs)	40 HP with minimum lifting capacity of 1300 kg (2866 lbs) 35 HP – 950kg (2094 lbs)	50 HP with minimum lifting capacity of 1600 kg (3527 lbs)
Seed-tray capacity	168 ltr. (5.9 cu. ft)	225 litres (7.9 cu. ft.)	300 litres (10.6 cu. ft.)
Maximum capacity (theoretically at maximum speed 12 km/h (7.5 mph) and single passage)	13950 m ² (150156 ft ²)	18900 m ² (203438 ft ²)	24900 m ² (268021 ft ²)
Seeding density per 100 m ² (1076.4 ft ²)	Fine seed: 0.2 - 2.8 kg (0.44 - 6.17 lbs) (adjustable in 10 steps) Coarse seed: 0.2 - 4 kg (0.44 – 8.82 lbs.) (adjustable in 10 steps)		
Shipping dimensions	L x W x H 1000 x 1480 x 1450 mm 58.3" x 39.4" x 57.1"	L x W x H 1000 x 1874 x 1450 mm 39.4" x 73.8" x 57.1"	L x W x H 1000 x 2374 x 1450 mm 39.4" x 93.5" x 57.1"
Three-point connection	Three-point CAT 1-2		
Lubricant	EP 2		
Tyre pressure	1 – 2 bar (14.5 - 29 psi)		
Standard parts	Fillable back roller with scraper. 5 gear sets for adjusting the seeding density. Integrated seed spreading tray. Manual container. Seed tray with sight-glass. Seeding wheel adjusting to the area. Independent cutting elements adjusting to the area. Adjustment legs for storage.		

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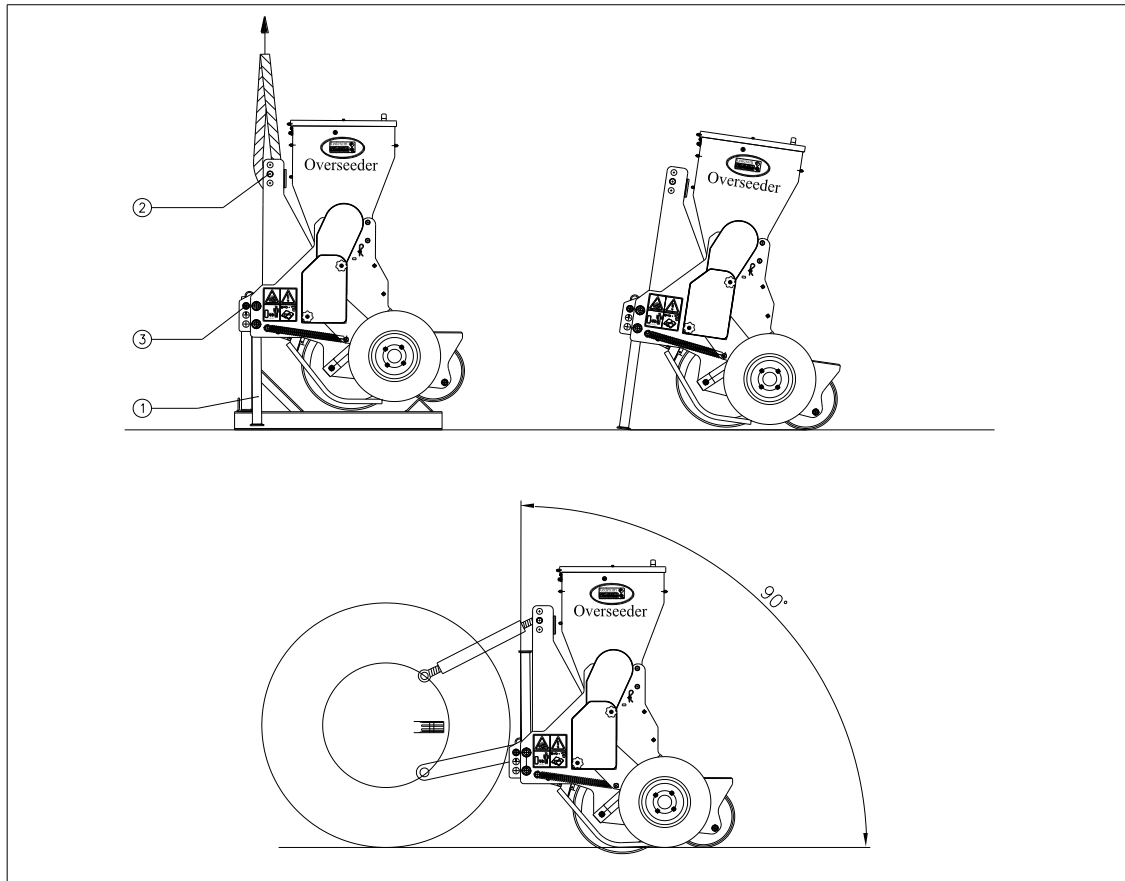


Fig. 6

2.0 FIRST INSTALLATION, REMOVING THE MACHINE FROM THE PALLET

The machine is standing vertically on the pallet. To remove the pallet and lay the machine horizontally on the ground, proceed as follows (see Fig. 6):

1. Turn the adjustable legs (1) downwards and lock them using the locking pins included.
2. Fasten a cable to the lifting point (2).
 - * * Make sure that the cable/crane/lift can lift at least

OS 1275:	800 kg (1764 lbs)
OS 1575:	1200 kg (2645 lbs)
OS 2075:	1600 kg (3527 lbs)
3. Raise the machine, including the pallet, 50 mm (2") from the ground.
4. Remove the pallet by sliding it over the lower 3-point pins
 - * **Do not crawl under the machine!!**
5. Slowly lower the machine until it is standing on the ground.
6. Attach the machine to a tractor.
 - * Use the correct tractor. See the specifications.
7. Set the tractor's stabiliser to 100 mm lateral movement.
8. Drive to the area that is to be tilled.
9. While driving carefully lower the machine into the ground.
10. Switch off the tractor and lock the tractor/Overseeder combination to prevent it from driving/sliding away.
11. Turn the top rod to adjust the machine angle to 90 degrees.

3.0 GENERAL PARTS LIST

Figure 7 shows some important parts:

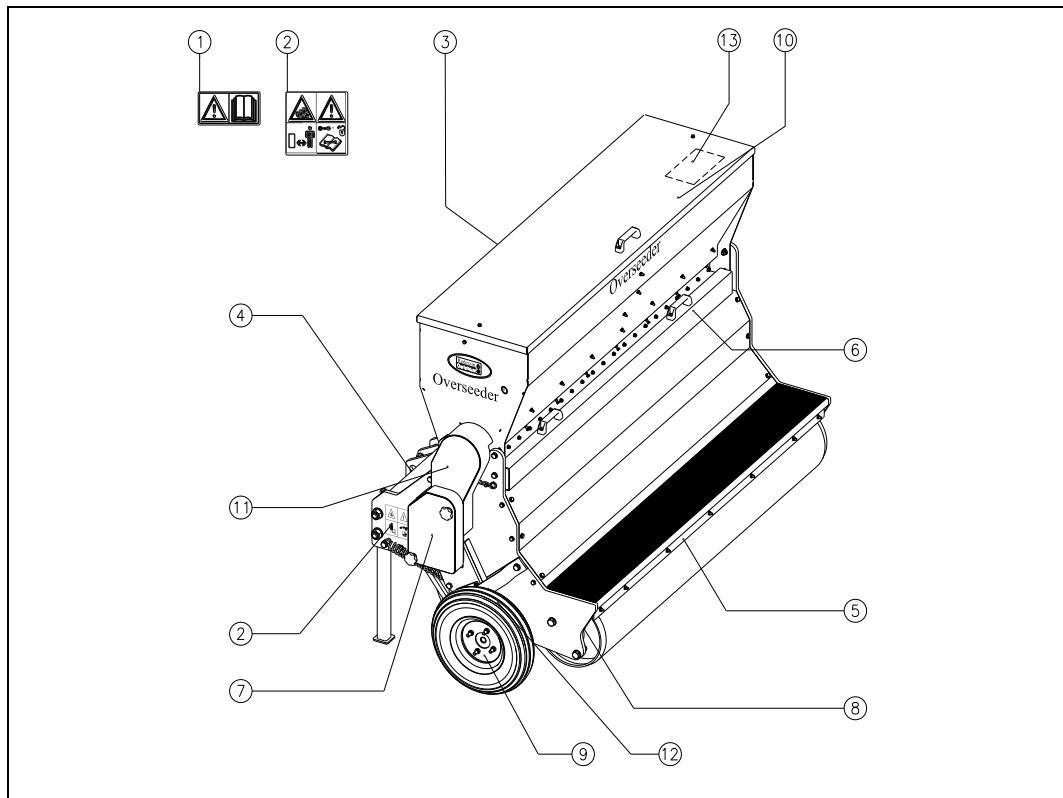


Fig. 7

1. Safety sticker RA, read user manual before use/toolbox.
 2. Safety sticker 911.280.402, keep a distance of at least 4 metres from the machine. Stop the engine before carrying out repairs or adjustments.
- * Make sure all stickers are clearly visible on the machine and are understood.
3. The serial number is at the front on the three-point plate of the machine.
 4. Three-point fastening pins.
 5. Adjustable back roller scraper.
 6. Receiving bin for a spreading test.
 7. Access hatch to the transmission for setting the seeding density.
 8. Filler cap of rear roller.
 9. Seeding wheel adjusting to the area.
 10. Seed tray.
Here also the various change gears for configuring the required seeding density are found.
 11. Cover providing access to the secondary drive chain and tensioner.
 12. Adjustment screw of chain tensioner primary drive chain.
 13. Sticker indicating the various gear settings and the associated seeding densities.

4.0 ADJUSTING THE WORKING DEPTH

The working depth can be adjusted by turning the top rod.

When the top rod is turned and, consequently, shortened the machine will incline forwards, setting the seeding depth lower.

This works when the ground to be tilled is soft enough to be cut to obtain the correct seeding depth.

The correct seeding depth can be achieved by, among other things, filling the rear roller with water.

@ If the rear roller is filled with water, empty it before it starts freezing.

5.0 SETTING THE SEED-QUANTITY

The seed quantity can be set on the Overseeder by using various change gears.

These provide various combinations for a broad range of settings (see Tab 1).

The gears have been marked with a number given in Tab. 1; by changing the gears as indicated, the required quantity setting is obtained.

The different combinations of gears have been installed in the seed tray.

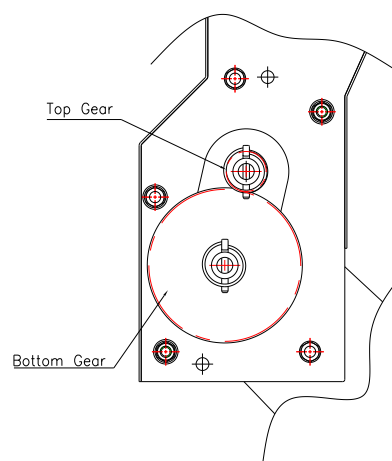


Fig. 8

Gear option		Bentgrass		Kentucky Bluegrass		Ryegrass	
Bottom	Top	Kg/100m ²	Lbs/1000ft ²	Kg/100m ²	Lbs/1000ft ²	Kg/100m ²	Lbs/1000ft ²
25	95	0.20	0.40	0.20	0.40	0.30	0.60
40	80	0.40	0.80	0.35	0.70	0.55	1.10
45	75	0.45	0.80	0.40	0.80	0.65	1.30
52	68	0.60	1.20	0.50	1.00	0.85	1.75
58	62	0.70	1.40	0.60	1.20	1.00	2.00
62	58	0.80	1.60	0.75	1.50	1.20	2.45
68	52	1.00	2.00	0.90	1.80	1.40	2.80
75	45	1.30	2.60	1.10	2.20	1.90	3.85
80	40	1.50	3.00	1.40	2.80	2.20	4.45
95	25	2.80	5.70	2.60	5.30	4.15	8.40

Tab. 1

These quantities are determined with a slit distance of 0.3 mm between the seeding roller and the pressure plate (see section 15.0 for setting).

In practice the quantities described in Tab. 1 may deviate to some extent due to other measuring/working conditions.

@ In order to determine exactly the right seeding quantity for the seed used, it is recommended to carry out a spreading test (see section 15.2).

6.0 TRANSPORTING THE OVERSEEDER

The user is responsible for the transport of the Overseeder behind the tractor when travelling on public roads. Check the national traffic rules. In view of the weight of the Overseeder, a maximum speed of 20 km/h (12.4 mph) should be observed while driving in open fields with the machine raised. Higher speeds may endanger the driver and/or other people and even damage the machine.

- * **When the machine is in the raised position, at least 20% of the weight of the tractor should be supported by the front axle.**

7.0 DRIVING SPEED

The driving speed is limited to 12 km/h (7.5 mph).

Higher speeds are not recommended in view of excessive wear and damage that may occur to the machine due to, for example, rocks in the ground.

8.0 GENERAL REMARKS ON THE USE OF THE OVERSEEDER.

Some general remarks/tips on the use of the Overseeder.

- @ A field can be tilled 2 or 3 times in different directions in order to obtain a higher seeding density and for seeding in a diamond shape.
- @ Do not make sharp turns, preferably drive in straight lines to avoid damaging the machine and/or the ground.
- @ When hitting a hard object in the soil, the cutting elements may be burred/damaged. Try to file burrs away or replace the cutting element.
- @ When the cutting elements become wet, the seed may stick and accumulate between the cutting elements.
- @ Make sure the cutting elements do not become wet or postpone the work.
- @ **NEVER** drive backwards while the running wheel is on the ground.

9.0 OPERATING THE OVERSEEDER

Before using the Overseeder in the field, check the following:

1. Are there any loose objects in the field? Remove these first.
2. Are there any slopes? The maximum slope this machine can work on is 20 degrees.
Always work downhill.
3. Does the ground contain hard objects? If so, use the Overseeder at a low speed and adjust the working depth.
4. Is there any danger of flying objects, such as golf balls, which may distract the attention of the driver? If so, do **NOT** use the Overseeder.
5. Is there any danger of sinking or sliding away? If so, postpone the work.
6. If the soil is frozen or very wet, the work should be postponed until the conditions are more favourable.

10.0 STARTING/STOPPING PROCEDURE

Before starting the seeding, check the machine for the following points:

* While checking the machine/tractor combination must be fully locked to prevent it from driving/sliding/sinking away. The tractor engine must be switched off.

- Check the seeding elements for damage and repair if necessary.
- Check if the passage to the seeding elements is not blocked (e.g. funnels).
- Check if the machine is not wet or moist, in particular the seeding device.
- Check the seed spreading by rotating the running wheel 1 time (counterclockwise).
- Check if the drive is running smoothly.
- Check the tyre pressure.

START SEEDING.

The starting procedure is VERY important. If this procedure is not followed exactly as described below, serious damage may occur to the machine. The procedure is as follows:

1. Put the seed in the seed tray.
2. Set the required seed quantity using the change wheels (see section 5.0).
3. Drive to the place where you want to start.
4. Start with a driving speed of about 3 km/h (1.9 mph).
5. While driving lower the machine carefully and in a controlled way until the seeding elements are cutting the ground.
6. If necessary, stop the cutting discs in the ground to adjust the working depth (see section 4.0).

* While adjusting, the machine/tractor combination must be fully locked to prevent it from driving/sliding/sinking away. The tractor engine must be switched off.

7. Increase the speed until the correct driving speed has been reached.

STOP SEEDING

1. Decrease the driving speed to about 3 km/h (1.9 mph).
2. While driving, raise the machine out of the ground.
3. Go to the following place and start again as described.

@ It is absolutely imperative that the above procedures are followed. If the machine is placed in the ground while standing still, it may be seriously damaged.

@ While driving, lower the machine **CAREFULLY AND IN A CONTROLLED WAY** during the tilling.

@ **NEVER** drive backwards when the running wheel is on the ground.

11.0 DISCONNECTING THE OVERSEEDER

The machine can be disconnected from the tractor as follows:

1. Turn the adjustable legs (see fig. 6 pos. 1) downwards and lock them using the locking pins included.
 2. Slowly lower the machine until it stands on the ground.
 3. Lock the rear roller to prevent it from rolling away.
 4. Loosen the top rod and remove it.
 5. Remove the lower arms from the tractor of the Overseeder.
- * **Place the machine on a stable and level surface and make sure that the machine is stable and cannot slide.**
- * **Switch off the tractor engine when people are walking around the machine and lock the tractor/machine combination to prevent it from moving!**
- @ **Make sure that the cutting elements do not touch the ground when storing the machine to avoid damage.**

12.0 TROUBLESHOOTING

Problem	Possible cause	Solution
Seeding cuts are poorly shaped.	Seeding discs are worn. Poor ground. Bearings of the seeding discs are worn. Too much dead leaves and roots in the top layer of the field. Top rod incorrectly adjusted.	Replace the seeding discs. Lower the working depth. Aerate/irrigate the ground if it is too dry and repeat the tilling later. Replace the bearings. Remove the dead leaves and roots. Increase the weight of the machine. Correctly adjust the rod.
Seeding cuts are not closed.	Slits are too wide. Ground is too hard.	Lower the working depth. Aerate/irrigate the ground and repeat the tilling later.
The seed is not in the seeding cut.	Worn seeding discs. Wrong working depth. Seeding pipes/funnels are blocked/dirty. Too wet conditions.	Replace the seeding discs. Adjust the machine to the correct working depth. Unblock/clean. Postpone the tilling.

Problem	Possible cause	Solution
Seed is spoilt from the seed tray.	Seeding slit too large. Distance between the scraper and the seeding roller is too large. The adjustment plate of the seeding slit on the side is leaking.	Readjust the seeding slit. Set the scraper closer to the seeding roller. Tape up/glue.
The machine does not reach the required depth.	Tractor tensioning is too low. Ground is too hard. Top rod is incorrectly adjusted. Too much dead leaves and roots in the top layer of the field. Not enough weight.	Put drawing arms into a higher hole. Aerate/irrigate. Correctly adjust the top rod. Remove the dead leaves and roots. Add weight.
Drive wheel is slipping	Ground is too wet. Tyre pressure is too low. Dose-measuring roller is dirty. Chain drive is rigid.	Postpone the tilling. Inflate. Clean the dose-measuring roller. Lubricate.

13.0 EU CERTIFICATE

We, Redexim BV, Utrechtseweg 127, 3702 AC Zeist, The Netherlands, declare entirely on our own responsibility that the product

OVERSEEDER MODEL 1575/2075 WITH MACHINE NUMBER AS INDICATED ON THE MACHINE AND IN THIS MANUAL,

to which this declaration relates is according to the stipulation of the 2006/42/EC directive for machines.

Zeist, 01/10/09



A.C. Bos
Manager Operations & Logistics
Redexim Holland

14.0 MAINTENANCE

Time schedule	Check point/lubricating point	Method
Before <u>each</u> use	Check for loose bolts/nuts. Presence and legibility of safety stickers (Fig. 5).	Tighten the loose bolts/nuts with the correct torque. Replace if damaged or missing.
After <u>first</u> 20 operating hours (new or repaired)	Grease the roller bearings of the rear roller. Check for loose bolts/nuts. Grease the drive chains.	Use EP 2 lubricating grease. Tighten the loose bolts/nuts with the correct torque. Use a chain spray.
After <u>every</u> 100 operating hours.	Grease the roller bearings of the rear roller. Check for loose bolts/nuts. Grease the drive chains. Check the tension of the drive chains. Check the seeding roller for dirt/damage. Check the seeding slit opening. Check the seed quantity. Check the seeding pipes/funnels. Check the seeding elements for damage.	Use EP 2 lubricating grease. Tighten the loose bolts/nuts with the correct torque. Use a chain spray. Tension the tensioners of the drive chains. Clean the seeding roller or replace it if necessary. Adjust the seeding slit if necessary. Carry out a spreading test. Clean if necessary. Repair or replace if necessary.

15.0 ADJUSTING THE SEEDING SLIT OPENING

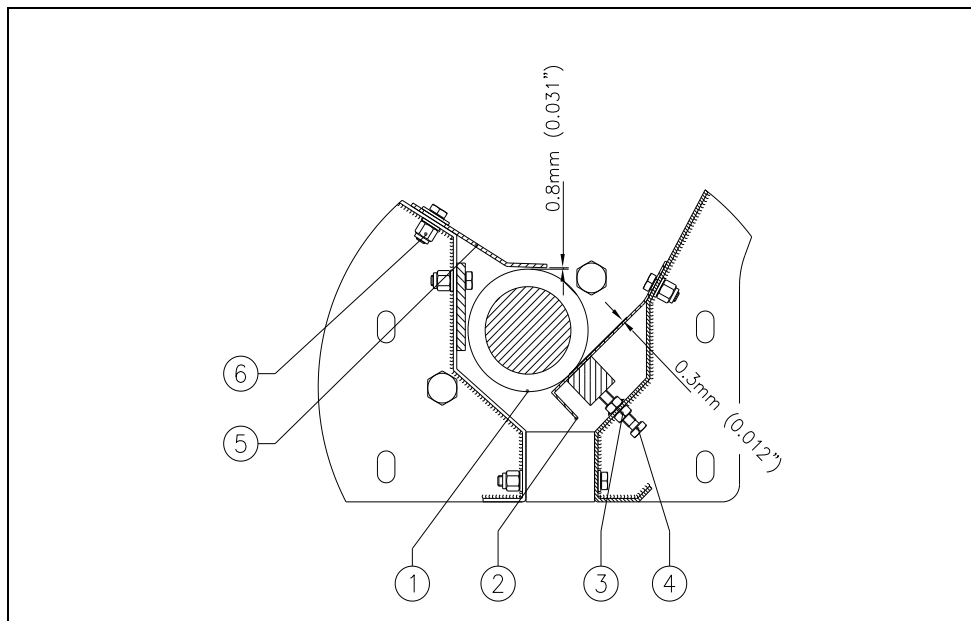


Fig. 9

If the seed production does not correspond with the table, the seeding slit may need adjustment.

This is done as follows: (see fig. 9)

1. Loosen all lock nuts 3.
2. Adjust bolt 4 such that a feeler gauge of 0.3 mm (0.012") can be slit just between the roller 1 and the adjustment plate.
3. Check all bolts 4 and calibrate the slit opening between roller 1 and adjustment plate 2 along the entire width of the machine to 0.3 mm (0.012").
4. Turn roller 1 half a turn and measure the slit opening.
If necessary adjust it to 0.3 mm (0.012") by turning bolt 4 in or out.
5. Tighten the lock nuts 3.

@ The split opening should be equal along the entire width of the roller.

@ The slit opening must have the same size as the smallest seed part. This opening is default set to 0.3 mm.

15.1 ADJUSTING THE SEED-TRAY SCRAPER

When the seeding tray is spoiling seed, the scraper setting may be incorrect.

To adjust this, proceed as follows (see fig. 9):

1. Loosen bolts and nuts 6.
2. Move scraper 5 up or down until the correct setting has been obtained.
3. Re-tighten the bolts and nuts 6.

@ The distance between roller 1 and scraper 5 is default set to 0.8 mm and should be equally set along the entire width of the roller.

15.2 SPREADING TEST

If the seeding device needs recalibration for a certain seed type or if it must be checked for proper operation in accordance with the seed table (see section 5.0 Tab 1) a spreading test is to be carried out.

This is done as follows: (see fig. 10).

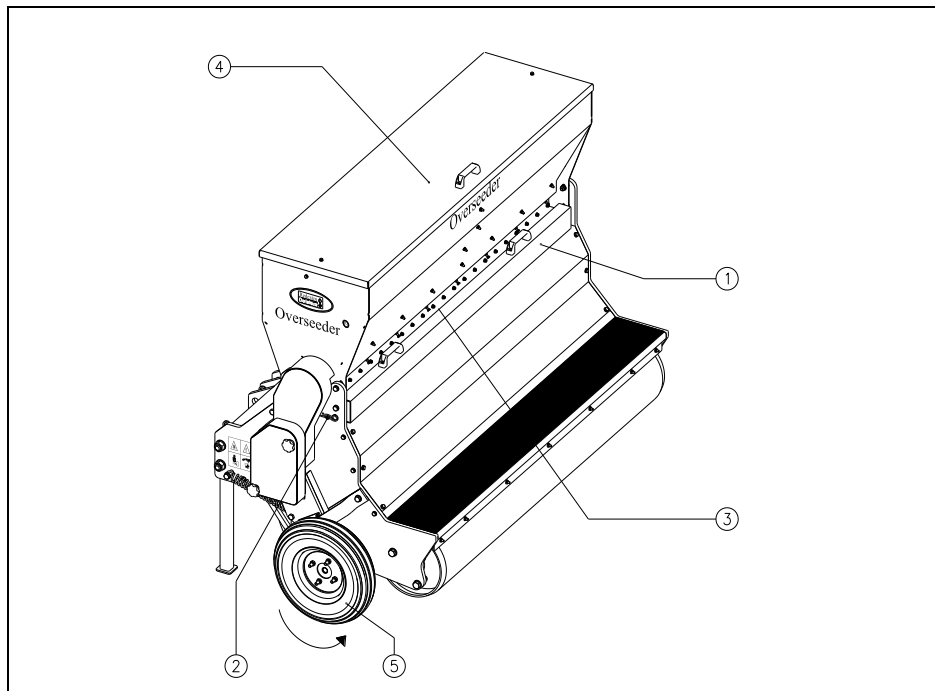


Fig. 10

1. Place the machine safely on the support legs on a level surface.
 - * Lock the machine to prevent it from moving.
2. First of all check the seeding slit opening for correct setting (see section 15.0).
3. Put the seed that is to be calibrated into the seed tray (4) and spread it equally over the tray.
4. Remove the spreading tray 1.
5. Remove pins 2 on both sides of the machine.
6. Remove the funnel tray (3).
7. Slide the spreading tray underneath below the seed tray (4).
8. Turn the wheel (5) 13 full rotations counterclockwise.
9. Weigh the seed that is collected and multiply this by 5.37 (1275)
Weigh the seed that is collected and multiply this by 4.08 (1575)
Weigh the seed that is collected and multiply this by 3.06 (2075).

The result is the weight of the seed that is seeded per (kg) 100m² / (lbs) 1000 ft².

Compare the results with Tab. 1 (section 5.0) and do another spreading test if necessary.

10. If the results of the spreading test do not reasonably match the calibration values, check the seeding slit opening and adjust this if necessary (see section 15.0).
11. Remount the parts in reverse order.